The Drilling of Fire and the Origin of the Sun

"Fire seems to have been the oldest, or one of the oldest, gods of center place in Mesoamerican cosmology." ¹

"The concept of the sacred, perpetual fire was fundamental...The drilling of new fire on various ritual occasions, especially dedications of new structures, was very important in the overall ritual pattern. The great new fire ritual at the expiration of the 52-year cycle constituted the most important ceremonial occasion in the entire system."

"Fire was widely considered to be of divine or celestial origin."⁴

"For the fire to go out was the greatest of catastrophes."⁵

Those readers who have viewed Mel Gibson's thrilling epic *Apocalypto* will have some idea of the abject terror which likely gripped the captive warrior who, upon being outfitted with a crown of feathers and promenaded before a throng of frenzied villagers calling for his sacrifice, was led to the Hill of the Star on a pitch-black night in 1507 and, after being forcibly splayed out upon a blood-stained rock, had his heart ripped out to appease the Aztec god of fire (Xiuhtecuhtli). Immediately after extracting the warrior's still-beating heart, the priest presiding over the gruesome ceremony solemnly drilled a fire in the victim's now-empty chest cavity, his every movement being monitored by an anxious crowd of onlookers, all of whom were convinced that the world would come to a sudden end should the new fire fail to be generated:

"It was claimed that if fire could not be drawn, then [the sun] would be destroyed forever; all would be ended; there would evermore be night. Nevermore would the sun come

[&]quot;The making of fire is tantamount to creation and birth."²

¹ D. Carrasco, *City of Sacrifice: The Aztec Empire and the Role of Violence in Civilization* (Boston, 1999), p. 103.

² K. Taube, "The Turquoise Hearth," in D. Carrasco ed., *Mesoamerica's Classic Heritage* (Boulder, 2000), p. 292.

³ H. B. Nicholson, "Religion in Pre-Hispanic Central Mexico," in *Handbook of Middle American Indians, Vol. 10* (Austin, 1971), p. 413.

⁴ J. Gonda, Some Observations on the Relations Between "Gods" and "Powers" in the Veda ('s-Gravenhage, 1957), p. 38.

⁵ S. Pyne, *Vestal Fire* (New York, 2011), p. 76.

forth. Night would prevail forever, and the demons of darkness would descend to eat men."

By all accounts, the New Fire ritual was the most important religious celebration in Mesoamerica.⁷ Commonly believed to reenact the central events of the Aztec Creation myth—specifically, the creation of the sun through the self-immolation of Nanahuatl⁸—it was typically held after a period of 52 years had elapsed:

"The Aztecs conceived of the end of the fifty-two-year cycle as a commemoration of the world's creation and would celebrate it by destroying their household items and extinguishing their fires. The rekindling of the new fire symbolized the creation of the sun and the beginning of time."

How is it possible to explain the origin of such peculiar belief-systems and religious rituals? In what sense could the drilling of fire have anything to do with the origin of the Sun, much less with Creation or the end of the world? In order to address such questions, it is instructive to briefly review fire's role in cosmogonic mythology before proceeding to examine the cult of Xiuhtecuhtli in greater detail.

Ancient Cosmogony and the Drilling of Fire

"Fire was the male principle in life, a spark that could impregnate a virgin." ¹⁰

For numerous ancient cultures, fire was deemed to be the primal spark that generated all life and therefore it occupied a central place in many early pantheons. Creation itself, in fact, was widely believed to have resulted from the drilling of fire during the Age of the Gods. The Skidi Pawnee of the American Plains, to cite but one example of this belief-system, conceptualized the ritual drilling of fire as a union of divine powers—specifically, a *hieros gamos* or "marriage" between the planets Mars and Venus. In Skidi

⁶ B. Sahagún, Florentine Codex: Book 7 (Sante Fe, 1953), p. 27.

⁷ D. Carrasco, *City of Sacrifice* (Boston, 1999), pp. 90-105.

⁸ K. Taube, "The Turquoise Hearth," in D. Carrasco ed., *Mesoamerica's Classic Heritage* (Boulder, 2000), p. 315: "The new fire rites reenacted the birth of the sun at Teotihuacan."

⁹ A. Headrick, "Gardening with the Great Goddess at Teotihuacan," in A. Stone ed., *Heart of Creation* (Tuscaloosa, 2002), pp. 88-89.

 $^{^{\}rm 10}$ R. J. Forbes, $\it Studies$ in Ancient Technology (Leiden, 1966), p. 2.

cosmology the drilling fire stick was identified with the prototypical masculine power (Mars as the "Morning Star") while the hearth symbolized the female power (Venus as the "Evening Star"). The primeval union of Mars and Venus produced the first human being and brought fertility and abundance to the world, among other wonders. Creation itself was commemorated or reactualized every time a fire was kindled:

"The Skiri also conceive of the firesticks as male and female. The idea is that the kindling of fire symbolized the vitalizing of the world as recounted in the creation. Specifically, the hearth represents the Evening Star and the drill the Morning Star in the act of creation."11

It will be noted that the hearth—the matrix of Creation—was explicitly identified with the planet Venus by the Skidi skywatchers. The prototypical fire-drill, on the other hand, was identified with the planet Mars. For the Skidi, as for indigenous cultures around the globe, the drilling of fire was conceptualized as a sexual act between cosmic powers. 12 Thus it is that, from a functional and symbolic standpoint, the ritual drilling of fire is identical to a *hieros gamos* between Mars and Venus *in illo tempore*.

Xiuhtecuhtli

The fire-god Xiuhtecuhtli is generally recognized as one of the most important gods in the Aztec pantheon. A prayer recorded by Sahagún in the 16th century reports that the god dwelled within the center of the hearth:

"Ueueteotl [the old god, i.e., Xiuhtecuhtli], who is set in the center of the hearth, in the turquoise enclosure."¹³

¹³ Florentine Codex: Book 6 (Santa Fe, 1969), p. 41.

¹¹ J. Murie, "Ceremonies of the Pawnee: Part I: The Skiri," Smithsonian Contributions to Anthropology 27 (1981), p. 40.

¹² R. Hall, An Archaeology of the Soul (Chicago, 1997), p. 98: "The drilling of fire by friction for the New Fire ceremony also symbolized the sexual union of Morning and Evening Star. The lower board or hearth board in such cases represented the Evening Star; the fire drill symbolized Morning Star." See also M. Graulich, "Myths of Paradise Lost in Pre-Hispanic Central Mexico," Current Anthropology 24 (1983), p. 580: "The boring of the horizontal stick with a drill for the Mesoamericans symbolized sexual intercourse." See also J. Frazer, Myths of the Origin of Fire (London, 1930), pp. 26ff.

The hearth is here explicitly identified with a turquoise enclosure (*xiuhtetzaqualco*). A related passage from elsewhere in the same book of Aztec prayers reveals additional information of interest:

"The father of the gods [Xiuhtecuhtli], who resideth in the navel of the earth, who is set in the turquoise enclosure, [enclosed] with the waters of the lovely cotinga, enclosed with clouds—Ueueteotl, he of Ayamictlan, Xiuhtecuhtli."

It will be noted that the Aztec fire-god is represented as residing in the navel of the earth (*tlalxicco*)—hence the god's epithet *Tlalxictentica*, "He Who Is in the Earth's Navel." The navel in question, moreover, is specifically identified as a "circle of turquoise," thereby seemingly identifying it with the hearth (In ancient Mesoamerica, as in other cultures around the globe, the hearth was conceptualized as representing the world center). The navel in the properties of turquoise, the hearth was conceptualized as representing the world center).

In addition to his role as Father of the Gods, the Aztec fire-god was also celebrated as the "archetype of all rulers." Henry Nicholson emphasized this aspect of the god's cult:

"Conceived as the eldest of the gods (*Huehueteotl*), *Xiuhtecuhtli* also served as the archetype of all rulers, who were preferably consecrated and confirmed in their public offices on his special calendric sign, 4 *Acatl* (Sahagún, 1950-69, bk. 4, p. 88; 1956, I:352)."

As is evident from Sahagún's testimony, the ruler's intimate connection with the ancient fire-god forms a cornerstone of Aztec religion.¹⁸ Indeed, the Aztec king was believed to actually incarnate the fire-god: "The new ruler was thought to serve as substitute of the

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¹⁴ *Ibid.*, p. 89.

¹⁵ B. Sahagún, Book IV, p. 87.

¹⁶ K. Taube, "The Jade Hearth: Centrality, Rulership, and the Classic Maya Temple," in S. Houston ed., *Function and Meaning in Classic Maya Architecture* (Cambridge, 1998), p. 432, writes: "The domestic hearth represents the world center." See also M. Pearson & C. Richards, "Architecture and Order," in M. Pearson & C. Richards eds., *Architecture and Order: Approaches to Social Space* (London, 1994), p. 11.

¹⁷ H. B. Nicholson, "Religion in Pre-Hispanic Central Mexico," in *Handbook of Middle American Indians, Vol. 10* (Austin, 1971), p. 413.

¹⁸ J. Olko, *Turquoise Diadems and Staffs of Office* (Warsaw, 2005), p. 128: "There is no doubt that the fire god Xiuhtecuhtli was a special patron of Aztec rulers."

deity and called 'the precious turquoise.'" In perfect keeping with this symbolism, Montezuma—the Aztec ruler at the time of the Conquest—had himself depicted as Xiuhtecuhtli. 20

The vagaries of Aztec royal ideology prompt questions at every turn. How is it possible to understand Xiuhtecuhtli's status as the archetype of rulers by reference to fire's role in the natural world? Why would fire be associated with the origin of kingship and archaic conceptions of sovereignty? For possible answers to these questions we pivot to briefly consider the cult of the fire-god in ancient India.

The Vedic Fire-god Agni

"The central physical focus of Vedic ritual is fire." ²¹

"The mystery of Agni's birth is unquestionably the central motif of the Indo-Iranian mythology."²²

The first words of the *Rig Veda*, the oldest collection of religious texts in India, attest to the reverence formerly accorded fire: "I worship the sacred fire" (*agnim ile*).²³ Again and again we read that the sacred fire must be generated in the ancient manner, which is to say by means of a fire-drill employing two sticks of wood, known as *arani*. In India, as in the New World, the fire-churning (*agni manthana*) was likened to sexual intercourse, with the two fire-sticks being conceptualized as male and female. This archaic symbolism is evident in the following hymn: "Bring thou the Matron: we will rub forth Agni in ancient fashion forth."²⁴ The word translated as Matron here, *vispátni*, denotes the flat wooden board upon which the fire was drilled.

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¹⁹ M. Izeki, Conceptions of 'Xihuitl': History, Environment and Cultural Dynamics in Postclassic Mexica Cognition (Oxford, 2008), p. 36, citing Sahagún, Book 6, 17.

²⁰ As in the *Codex Borbonicus*, for example. See the discussion in P. Hajovsky, *On the Lips of Others: Moteuczoma's Fame in Aztec Monuments and Rituals* (Austin, 2015), p. 88

²¹ S. Jamison, *The Ravenous Hyenas and the Wounded Sun* (Ithaca, 1991), p. 17.

²² F. Kuiper, *Ancient Indian Cosmogony* (Leuven, 1983), p. 29.

 $^{^{23}}$ RV 1.1.1.

²⁴ RV III:29:1. See also S. Jamison & J. Brereton, *The Rigveda* (Austin, 2014), p. 503: "This process of churning out the fire was regularly identified in the Rgvedic hymns with

The sacred fire itself was identified with Agni and conceptualized as the prototypical masculine power. It was the fire-god Agni whom women beseeched to implant an embryo (*garbha*) within their womb.²⁵

The hearth-like *vedi*, in turn, was conceptualized as the archetypal female power. According to Mircea Eliade, the union of male and female powers inherent in the drilling of fire was a dominant theme in Vedic symbolism:

"In Vedic India the sacrificial altar (*vedi*) was looked upon as female and the fire (*agni*) as male and 'their union brought forth offspring.' We are in the presence of a very complex symbolism which cannot be reduced to a single plane of reference. For, on the one hand, the *vedi* was compared to the navel (*nabhi*) of the Earth, the symbol *par excellence* of the 'centre'. But the *nabhi* was also established as being the womb of the Goddess (cf. Shatapatha-Brahmana I, 9, 2, 21)."²⁶

Evident here is the idea that the hearth (*vedi*) symbolized the navel of the primordial earth, the latter commonly identified as the center of the cosmos.²⁷ The Vedic Agni, like the Aztec fire-god Xiuhtecuhtli, resided within this navel. A hymn from the *Rig Veda* alludes to this archaic symbolism:

"As he was being born in the highest distant heaven, Agni became manifest to Matarisvan. By the resolve and might of him as he was kindled, his blaze illuminated heaven and earth...The all-possessor whom the Bhrgus have aroused upon the navel of the earth."

sexual intercourse, and this repeated image presents the upper fire-churning stick as the father...and the lower fire-churning stick as the mother of fire."

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²⁵ RV 10:184: 2-3. See also the discussion in A. Parpola, *The Roots of Hinduism* (Oxford, 2015), p. 284.

²⁶ M. Eliade, *The Forge and the Crucible* (New York, 1962), p. 39.

²⁷ A. Coomaraswamy, "An Indian Temple," in R. Lipsey ed., *Coomaraswamy: Selected Papers* (Princeton, 1977), p. 7: "The sacred hearth, is always theoretically at the center of navel of the earth."

²⁸ Rig Veda 1:143:2-4 as translated in S. Jamison & J. Brereton, *The Rigveda* (Oxford, 2014), p. 320.

In ancient India, as in pre-Columbian Mexico, the ritual landscape was purposefully organized in order to reproduce or model the cosmos.²⁹ The local hearth and central fire, according to this archaic ideology, mirrored and symbolized the exemplary cosmic hearth and its stellar fire (fire was born in the highest heaven, according to the previous hymn). As Eliade pointed out with great insight and erudition, the ritual drilling of fire was commonly believed to reenact Creation *in illo tempore*. And insofar as the fire was to be found at the center of the world, it follows that Creation proceeded from the *vedi* (*nabhi*) outwards:

"It is from a 'centre' (navel) that the creation of the world starts and, in solemnly imitating this primary model, every 'construction', every 'fabrication', must operate from a starting 'centre'. The ritual production of fire reproduces the birth of the world." 30

In addition to his status as the Prime Mover in Creation, the Vedic fire-god was intimately associated with ancient conceptions of kingship and sovereignty. Jan Gonda offered the following summary of Agni's cult in ancient India, one that we would endorse in its entirety:

"In India and elsewhere this idea of fire was expanded to gigantic proportions, the element becoming a paramount deity, a universally vivifying power, a fundamental principle, supporting mankind and the universe; seated on the back of the earth, Agni fills the air with his shine, props the sky with his light, upholding the quarters by his lustre (cf. *Vaj.S.* 17, 72). His is universal sovereignty (*samrajya-Sat.Br.* 9,3,4,17), through whom everything exists (*Sat.Br* 8,1,1,4)...He is the lord of offspring (*Sat.Br.* 9,1,2,42) and

²⁹ S. Jamison & J. Brereton, *The Rigveda* (Oxford, 2014), p. 401: "[The net effect of identifying Agni with the fire] is to concentrate all of the cosmos into this small space, the sacrificial ground, and this single entity, the sacrificial fire—indeed making the sacrificial microcosm the equivalent of the macrocosm." See also K. Taube, "The Jade Hearth: Centrality, Rulership, and the Classic Maya Temple," in S. Houston ed., *Function and Meaning in Classic Maya Architecture* (Cambridge, 1998), p. 429: "Aside from

serving as god houses, temples were also models of the cosmos." M. Eliade. *op. cit.*, pp. 39-40.

regarded as identical with Prajapati (*Sat.Br.* 6,2,2,33), the procreative power of fire being a frequent theme of mythical traditions."³¹

To summarize: In Vedic India, as in indigenous Mexico, the fire-god was intimately associated with ancient conceptions of Creation and sovereignty and, as such, was localized at the navel of the earth. Insofar as not one of these symbolic associations finds a rational explanation by reference to fire's role in the familiar natural world, the question arises as to how to understand the origin of these particular belief-systems?

The End of the World

To return to the constellation of ideas associated with the Aztec New Fire ritual: Fear that the world would come to a catastrophic end if the sacred fire was not rekindled hung like a dark pall over the entire celebration. The observations of Sahagún are representative in this regard, being echoed by other early chroniclers:

"At nightfall, from here in Mexico, they departed. All the fire priests were arranged in order, arrayed in and wearing the garb of the gods...And the one who was the fire priest of Copulco, who drew new fire, then began there. With his hands he proceeded to bore continuously his fire drill...And when it came to pass that night fell, all were frightened and filled with dread. Thus it was said: it was claimed that if fire could not be drawn, then [the sun] would be destroyed forever; all would be ended; there would evermore be night. Nevermore would the sun come forth. Night would prevail forever, and the demons of darkness would descend, to eat men..."

In order to make sense of such primal and deep-seated fears it is essential to recognize the fundamental affinity between the new fire and the new "sun" which it represented.³³ For

³¹ J. Gonda, Some Observations on the Relations Between 'Gods' and 'Powers' ('S-Gravenhage, 1957), p. 44.

³² The Florentine Codex: Book 7 (Santa Fe, 1953), p. 27.

³³ M. Izeki, *Conceptions of 'Xihuitl': History, Environment and Cultural Dynamics in Postclassic Mexica Cognition* (Oxford, 2008), p. 34 writes: "The sun was regarded as the celestial fire by the Mexica." See also R. Hall, *An Archaeology of the Soul* (Urbana, 1997), p. 194: "The hearth fire was regarded as an earthly representation of the sun in much Indian belief." S. Jamison & J. Brereton, *The Rigveda* (Oxford, 2014), p. 41 observe: "As a god he [Agni] is often identified with the sun, the celestial form of fire."

the one belief is impossible to understand apart from the other. The decisive key to deciphering the archaic belief-system in question is the previously quoted statement recorded by Sahagún: "It was claimed that if fire could not be drawn, then [the sun] would be destroyed forever; all would be ended; there would evermore be night."

It is commonly acknowledged that Sahagún's text includes clear evidence of archaic language and mythological references not otherwise preserved.³⁴ What, then, does the *Florentine Codex* have to say regarding the Aztec traditions surrounding the generation of the new fire and associated ideas of Creation and apocalyptic cataclysm?³⁵

In the Aztec myth of Creation, it is the leprous god Nanahuatl who sacrifices himself on a giant hearth in order to generate the "sun." This myth is told in a number of different indigenous sources, typically in a frustratingly fragmentary fashion. According to the account preserved by Sahagún, Nanahuatl eventually succeeded in bringing light to a darkened world through an act of self-sacrifice in the time of Beginning:

"It is told that when yet [all] was in darkness, when yet no sun had shone and no dawn had broken—it is said—the gods gathered themselves together and took counsel among themselves at Teotihuacan. They spoke; they said among themselves: 'Come hither, o gods! Who will carry the burden? Who will take it upon himself to be the sun, to bring the dawn?'...None dared; no one else came forward [apart from Tecuciztecatl]. Everyone was afraid; they [all] drew back...Then the gods called to this one. They said to him: 'Thou shalt be the one, O Nanauatzin.'...And then, also, at this time, the fire was laid. Now it burned, there in the hearth...And when this was done, when midnight had come, all the gods proceeded to encircle the hearth, which was called *teotexcalli*, where for four days had burned the fire...[Tecuciztecatl fails to throw himself on the fire out of fear]...And Nanauatzin, daring all at once, determined...All at once he quickly threw and

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³⁴ R. Townsend, "Coronation at Tenochtitlan," in E. Boone ed., *The Aztec Templo Mayor* (Washington D.C., 1987), p. 391.

³⁵ M. Graulich, "Aztec Human Sacrifice as Expiation," in J. Bremmer ed., *The Strange World of Human Sacrifice* (Leuven, 2007), p. 10 offered a similar opinion: "These rituals [Aztec human sacrifice] helped the universe function by reenacting the creation of the world and the birth of Venus-Maize, then the creation of the sun that vanquished the forces of darkness in the underworld and rose, bringing the day and the rainy season associated with it."

cast himself into the fire; once and for all he went. Thereupon he burned; his body crackled and sizzled. And when Tecuciztecatl saw that already he burned, then, afterwards, he cast himself upon [the fire]. Thereupon he also burned...And after this, when both had cast themselves into the flames, when they had already burned, then the gods sat waiting [to see] where Nanauatzin would come to rise—he who first fell into the fire—in order that he might shine [as the sun]; in order that dawn might break...And when the sun came to rise, when he burst forth, he appeared to be red; he kept swaying side to side. It was impossible to look into his face; he blinded one with his light. Intensely did he shine. He issued rays of light from himself; his rays reached in all directions; his brilliant rays penetrated everywhere...They could only remain still and motionless [i.e., the two celestial lights Nanauatzin and Tecuciztecatl]...Here endeth this legend and fable, which was told in times past, and was in the keeping of the old people." 36

The report that Nanahuatl's auto-sacrifice by fire occurred during a period when all "was in darkness" is one of several clues that suggests we are likely dealing with an archaic account of Creation, inasmuch as the cosmogonic myths of cultures around the globe typically place the inaugural appearance of light—the prototypical Dawning—in a general context of apocalyptic Darkness.³⁷ Indeed, the prototypical "sun" is widely reported to have originated from a "house" or place of darkness.³⁸

If this much is clear, it is less obvious what natural events or conditioned learning response might have caused the Aztec skywatchers to recognize a fundamental affinity between the sacred fire and the sun. That just such an association was made is evident—

³⁶ B. de Sahagún, *The Florentine Codex: Book* 7 (Santa Fe, 1953), pp. 1-8.

³⁷ According to the account of Creation in *The Florentine Codex: Book 3* (Santa Fe, 1978), p. 1: "the time was when there still was darkness." See also E. Cochrane, *On Fossil Gods and Forgotten Worlds* (Ames, 2010), pp. 231-244. See also H. Ringgren, "Light and Darkness in Ancient Egyptian Religion," in *Liber Amicorum* (Leiden, 1969), pp. 144-145: "The victory of light at creation, however, is not a final one. Darkness is not defeated once and for all, it has only been pushed back and surrounds this world of light, continuously threatening to encroach upon its dominion...Consequently, darkness has to be repelled constantly. Every sunrise is a repeated defeat of chaos and darkness or, if you like, a new creation."

³⁸ E. Cochrane, *Phaethon: The Star That Fell From Heaven* (Ames, 2017), pp. 117-119.

hence their belief that if the fire were allowed to go out the sun would be extinguished. The same conclusion is supported by the fact that a very similar belief system prevailed in Vedic India. Witness the following hymn to Agni from the *Rig Veda*, wherein the Angirases perform the archetypal deed traditionally ascribed to the Vedic Thundergod Indra—namely, the cleaving of the primeval rock that proved to be the origin of all things:

"By truth they threw open the rock, having split it. The Angirases roared along with the cows. For blessing the men besieged the dawn; the sun became visible when the fire was born."

Here, too, the appearance of the first dawn and prototypical "sun" is expressly compared to the generation of fire. Indeed, a recurring theme in the *Rig Veda* holds that the appearance of the sun is contingent upon the kindling of Agni.⁴⁰

If a logical connection between the ritual drilling of fire and the generation of the sun can be recognized in ancient Vedic and Aztec lore—and it is quite impossible to deny such a connection in light of the cosmogonical traditions adduced above—it stands to reason that the Aztecs' angst regarding the ominous effects that would befall the world were the perpetual fire allowed to go out might be related to analogous fears attached to solar eclipses. For much as was the case with the Aztecs' anxiety regarding the extinction of the perpetual fire, numerous cultures feared that a permanent "Night" might ensue every time the sun was eclipsed. Sahagún himself provides ample evidence of this particular belief-system in ancient Mexico:

"Then [upon an eclipse of the sun] there were a tumult and disorder. All were disquieted, unnerved, frightened. There was weeping. The common folk raised a cry, lifting their voices, making a great din, calling out, shrieking. There was shouting everywhere.

People of light complexion were slain [as sacrifices]; captives were killed. All offered

³⁹ RV IV:3:11 as translated in S. Jamison & J. Brereton, *The Rigveda* (Oxford, 2014), p. 562.

⁴⁰ RV V:6:4. See especially the discussion in G. Nagy, *Greek Mythology and Poetics* (Ithaca, 1990), p. 147: "The macrocosmic principle inherent in Agni, god of sacrificial fire, is anchored in a belief that the rising of the sun is dependent on the kindling of the sacrificial fire."

their blood...And in all the temples there was the singing of fitting chants; there was an uproar; there were war cries. It was thus said: 'If the eclipse of the sun is complete, it will be dark forever! The demons of darkness will come down; they will eat men!'",41

Inasmuch as solar eclipses are never accompanied by cosmic disaster, it is difficult to explain such mass hysteria by reference to the familiar natural world. Nor, for that matter, are solar eclipses permanent or even prolonged in nature, lasting for a few minutes at most. How, then, are we to explain such stubbornly held beliefs—beliefs which, it must be emphasized, are well represented among indigenous cultures on every inhabited continent?⁴²

Equally notable is Sahagún's reference to the "demons of darkness" that would descend from the sky during an eclipse, wreaking havoc and destruction. The demons in question are the Tzitzimime, falling stars elsewhere described as being long-haired agents of destruction. Here, too, the mention of disaster-bringing falling stars is enough to confirm that Sahagún's indigenous informants were not describing a run-of-the-mill solar eclipse—rather, an impending catastrophe threatening the world with destruction.

Sahagún's statement that an eclipse might lead to permanent darkness is especially telling, for it suggests that the Aztecs' obsessive fears about solar eclipses, like their sense of dread regarding the extinction of the perpetual fire at the end of their sacred Calendar Round, can only be properly understood by reference to the Aztec myth of Creation, wherein a prolonged period of darkness forms a central theme.

⁴¹ B. Sahagún, *Florentine Codex: Book 7* (Sante Fe, 1953), p. 2.

⁴² J. Grimm, *Teutonic Mythology, Vol. 2* (Gloucester, 1976), p. 706: "One of the most terrific phenomena to heathens was an *eclipse* of the sun or moon, which they associated with a destruction of all things and the end of the world." The following report from the Amazonian region not only recalls Sahagún's report, it is representative of analogous traditions that recur around the globe: "[Upon a solar eclipse] it is then feared that the epoch of chaos will return and monsters and demons will come from the jungle and rivers to attack people." See G. Reichel-Dolmatoff, *Amazonian Cosmos* (Chicago, 1971), p. 72. ⁴³ Eduard Seler, *Codex Vaticanus No. 3773* (Berlin, 1903), p. 172 doubtless had it right when he described Tzitzimime as "*stellar deities* who became demons of darkness." See also B. Brundage, *The Fifth Sun* (Austin, 1979), pp. 62-64.

Insofar as Sahagún's account of the New Fire ceremony emphasizes its connection with the New Year (see below), it is not surprising to find that apocalyptic fears inform Mesoamerican beliefs about the end-of-the-year rituals associated with New Year, the latter acknowledged to commemorate Creation:

"Among the Postclassic Maya of Yucatan, the end of the 365-day vague year was an especially dangerous time and, according to the colonial *Cantares de Dzithalché*, was equivalent to the destruction and re-creation of the world. Thus much of the imagery in the Yucatec new year rites also appears in Maya creation mythology. Similarly, the completion of the Aztec fifty-two year cycle was marked by an anxious vigil: if new fire was not successful drilled, the terrifying star demons of darkness, the *tzitzimime*, would reassert their control over the world."

According to Sahagún's eye-witness testimony, after the new fire was generated all the local villagers put on new clothes and replaced their hearths and pestles, the latter of which were intentionally destroyed at the outset of the ritual. With the generation of fire and the dawning of the New Year, the threat of apocalyptic darkness and assault at the hands of pestilence-causing demons was effectively banished:

"Thus it was said that truly the year newly started. There was much happiness and rejoicing. And they said: 'For thus it is ended; thus sickness and famine have left us." "45

Such ideas find striking parallels in the Old World. In ancient Rome, for example, the Old Year was ushered out with the extinction of all fires; the New Year, in turn, was marked by the generation of a new fire in the temple of Vesta, the latter representing a renewal of the generative forces of nature.⁴⁶ So, too, in ancient Greece the new fire generated at Delphi was "a signal of a new beginning."

⁴⁵ B. Sahagún, *Florentine Codex: Book 7* (Sante Fe, 1953), p. 31.

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⁴⁴ K. Taube, *Aztec and Maya Myths* (Austin, 1993), p. 15.

⁴⁶ Ovid *Fasti* 3, 141-144. See also G. Dumezil, *Archaic Roman Religion, Vol. 1* (Baltimore, 1966), p. 322.

⁴⁷ H. S. Versnel, "Apollo and Mars One Hundred Years After Roscher," *Visible Religion* IV/V (1985/6), p. 154. See also W. Kristensen, *The Meaning of Religion* (The Hague,

For one reason or another, the peculiar superstitions and ominous portents surrounding the end of the year have received relatively little attention from scholars—this despite their seemingly universal distribution and the profound importance they held within indigenous cultures in general. A notable exception in this respect is the Dutch scholar Arent Wensinck. As Wensinck discerned many years ago, traditions regarding the potential disasters attending the turning of the Year reflect archaic conceptions regarding Creation, wherein it was commonly believed that an all-engulfing Darkness threatened to destroy the world:

"This material speaks for itself; not only is each New Year a memorial of the creation but it is a repetition of it, and the creation itself is regarded as a kind of New Year. Indeed the last expression is the right one. New Year belongs to cosmogony, New Year and creation are the reflection one of the other...Finally we come to the relation between New Year and the chaos that precedes the cosmos and without which the latter cannot come into existence...Only when the Tehom is beaten back, or—in mythological language—when Tiamat is defeated, does the world order begin...It is a struggle of life and death between the powers of darkness and light, of confusion and order, of Evil and Good...

The end of the cosmos is seen in an eclipse of the sun, when the very existence of the god of order is threatened and the world is abandoned to the powers of darkness." **

Eliade, doubtless influenced by Wensinck's groundbreaking study, also called attention to the apocalyptic fears attending the end of the Year. Thus, in a discussion of the ritualized drilling of the new fire, he offered the following conclusions:

"The ritual production of fire reproduces the birth of the world. Which is why at the end of the year all fires are extinguished (a re-enactment of the Cosmic night), and rekindled on New Year's Day (this is an enactment of the Cosmogony, the rebirth of the world.)" ⁴⁹

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^{1960),} p. 139, who points out that "new life" began on Lemnos with the generation of the New Fire.

⁴⁸ A. J. Wensinck, "The Semitic New Year and the Origin of Eschatology," *Acta Orientalia* 1 (1923), p. 169.

⁴⁹ M. Eliade, *The Forge and the Crucible* (Chicago, 1962), pp. 39-40. See also W. Kristensen, *The Meaning of Religion* (The Hague, 1960), p. 139 who wrote as follows with respect to the renewal of the Vestal fire: "The idea at the basis of this custom is that

At this point in our analysis we are finally in a position to identify the probable natural-historical basis for the Aztecs' seemingly irrational fears surrounding the drilling of the new fire and solar eclipses: It was precisely because the Aztec priests *knew* that the world had previously been brought to the very brink of extinction when a former "sun" had been blotted out that they had reason to believe that such terrifying conditions might return were the present Sun to become eclipsed or—in what amounts to the same thing—were the perpetual fire allowed to die out. Indeed, it is our opinion that this particular collective phobia can only be fully understood by reference to a collective memory of an extraordinary cataclysm preceding the First Dawn, whereupon a primal "sun" *was* eclipsed and an apocalyptic Darkness threw the cosmos into chaos and confusion.

Such archetypal fears, in turn, are incomprehensible apart from Aztec traditions of multiple suns. As is well known, it was a central tenet of Aztec cosmology that previous suns had come and gone amidst terrifying catastrophic disasters of one form or another. Nor were the Aztecs alone in this belief: "This belief that the sun was not eternal was shared by other American Indian tribes so widely that we consider it must have been part of their belief long before any high culture had arisen in the Americas." 51

Equally widespread and foreboding were archaic traditions telling of a "Long Night" or an extended period of Darkness that had gripped the world during a previous Age.⁵² If these traditions of a Primeval Darkness have an historical basis, it follows that the Aztecs' fears regarding eclipses and the extinction of the perpetual fire originated in witnessed natural events of a catastrophic nature and are thus essentially rational in

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the yearly renewal of the life of nature is not a natural event that occurs automatically; it is a miracle, the repetition of the miracle of the original Creation."

⁵⁰ H. B. Alexander, "Latin American Mythology," in L. Gray ed., *The Mythology of All Races* (New York, 1964), p. 85 observes: "The earlier world-epochs, or 'Suns,' as the Mexicans called them, are commonly four in number, and each is terminated by the catastrophic destruction of its Sun and of its peoples, fire and flood overwhelming creation in successive cataclysms."

⁵¹ C. Burland, *The Gods of Mexico* (New York, 1967), p. 140.

⁵² E. Cochrane, *On Fossil Gods and Forgotten Worlds* (Ames, 2010), pp. 233-236. D. Carrasco, *City of Sacrifice* (Boston, 1999), p. 90 observes that the Aztecs were haunted by "an assertion that the sun was unreliable, unstable, and wobbled at its original creation."

origin, albeit induced by traumatic experiences and regularly reinforced by mimetic rituals further instilling collective hysteria. That we have to do here with *remembered* events of a catastrophic nature—racial and cultural memories, as it were, rather than figurative language run amok—is rendered virtually certain by the manifold ancient traditions reporting that the prototypical "sun" of Creation must be distinguished from the present Sun. Here, too, such traditions have been almost uniformly ignored by scholars of comparative myth—this despite the fact that they are surprisingly common and widespread.

As it turns out, some of the most compelling testimony comes from pre-Columbian Mesoamerica. The following account of the "dawning" of the prototypical sun comes from the Quiché Maya *Popol Vuh*:

"Like a man was the sun when it showed itself, and its face glowed when it dried the surface of the earth. Before the sun rose, damp and muddy was the surface of the earth, before the sun came up; but then the sun rose, and came up like a man. And its heat was unbearable. It showed itself when it was born and remained fixed [in the sky] like a mirror. Certainly it is not the same sun which we see, it is said in their old tales."53

Yet if it was not the current sun that formed the subject of the Quiché account of Creation, which sun was it? The unbearably intense "heat" of the former sun, together with its "fixed" or motionless nature, offers a decisive clue and recalls Sahagún's description of Nanahuatl's "sun" in the Aztec myth of Creation:

"And when the sun came to rise, when he burst forth, he appeared to be red; he kept swaying side to side. It was impossible to look into his face; he blinded one with his light. Intensely did he shine. He issued rays of light from himself; his rays reached in all directions; his brilliant rays penetrated everywhere...When both appeared [over the earth] together, they could, on the other hand, not move or follow their paths. They could only remain still and motionless [i.e., the two celestial lights Nanauatzin and Tecuciztecatl]..."

 $^{^{53}}$ M. León-Portilla & E. Shorris, In the Language of Kings (New York, 2001), p. 447.

However such traditions are to be explained from the standpoint of modern astronomical science, it seems obvious that the peculiar stories surrounding Nanahuatl hold the key to sorting out the Aztec belief-systems linking the drilling of fire with the origin of the sun. Yet despite his prominent role in Aztec cosmogonical traditions, the archaic god in question has received relatively little attention from modern scholars.

Nanahuatl

To my knowledge, the most comprehensive and insightful analysis of Nanahuatl's mythology was that offered by B. C. Brundage. This vastly underrated historian summarized the god's myth as follows:

"One of the more enigmatic figures in Mesoamerican mythology is the diseased god Nanahuatl. The name itself is curious. Nanahuatl is the word for afflictions of the skin, generally running or pustulous sores. The god's name is thus simply the name of a disease, and he may be considered to be the god who sends the disease and who can also cure it. Human sacrifices made to him in fact were chosen from among those who suffered from his diseases. He is thus the 'disease' Quetzalcoatl. He must have been a very old god, for he appears to have had a limited cult at the time of the Spanish entry, yet he is the central figure in the myth of the five suns that originated in the days of Teotihuacan. His name also appears as Nanahuatzin or Nanahuaton, both translated as Little Nanahuatl, the implication being that he was a dwarf or was thought to be strikingly small in stature. He appears among the Quichés as Nanahuac and is one of their early creator gods, along with Gukumatz (Quetzalcoatl), and he is called by them 'dwarf,' or 'green,' that is, young." 54

What are we to make of this curious mishmash of traditions? As is evident from Brundage's summary, Nanahuatl is literally defined by his pustulous sores. Yet here, too, scholars have been virtually silent about what this particular trait could signify or reference. Michel Graulich, in his discussion of this core Mesoamerican myth, could only muster the following admission of befuddlement:

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⁵⁴ B. Brundage, *The Fifth Sun* (Austin, 1979), pp. 224-225.

"What are the gods doing on earth and in darkness? Why are they material and why is one of them bubonous?" ⁵⁵

As we have argued elsewhere, the fact that the Morning Star was commonly conceptualized as suffering from "sores" or skin eruptions by indigenous cultures throughout North and South America provides an obvious clue to understanding the mythological traditions under review here. ⁵⁶ The following myth from the Sikuani of South America is instructive in this regard:

"In those days the sun and the moon and everyone were human beings and lived on this earth. Sun had a son who had sores all over his body; he was the morning star." 57

Analogous traditions are attested in Mesoamerica. According to the Mixe-Popoluca of Oluta, the Creator Viejito was a dwarfish being beset by skin eruptions or pimples:

"The Mixe-Popoluca of Oluta and Sayula, in the Veracruz Isthmus region, view the morning star as an old man, *El Viejo* or *Viejito*, and the east is described as the 'place of the Old Man's house'...Viejito is alone, not married. Viejito has a ragged shirt, white is his hair...long is his hair. He is frail, he walks with his staff, dirty little breeches, long is his white beard, his body has pimples all over..."⁵⁸

If we are to take our cue from these Amerindian traditions describing the Morning Star as covered with sores, it stands to reason that the Aztec Nanahuatl is to be identified with that same celestial body.⁵⁹ This identification is further bolstered by the fact that native sources identify Nanahuatl with Quetzalcoatl. The so-called *Legend of the Suns* (1558), for example, describes the former god as follows:

⁵⁷ J. Wilbert & K. Simoneau, "Sun and Moon," in *Folk Literature of the Sikuani Indians* (Los Angeles, 1992), pp. 25-28.

⁵⁵ M. Graulich, "Aztec Human Sacrifice as Expiation," in J. Bremmer ed., *The Strange World of Human Sacrifice* (Leuven, 2007), p. 15.

⁵⁶ E. Cochrane, *Starf*cker* (Ames, 2010), pp. 56-72.

Quoted from I. Sprajc, "The Venus-Maize Complex in the Mesoamerican World View," *Journal of the History of Astronomy* 24 (1993), pp. 35-36.

⁵⁹ E. Cochrane, *Starf*cker* (Ames, 2006), pp. 111-114.

"The name of this sun is 4 Motion. This is now our sun, the one under which we live today. This is its figure, the one here, because his sun fell into the fire at the sacred hearth in Teotihuacan. It is the same sun as that of Topiltzin, 'Our Beloved Prince' of Tollan, Quetzalcoatl. Before becoming this sun, its name was Nanahuatl, who was of Tamoanchan "60

That Quetzalcoatl himself is to be identified with the Morning Star is well-known. On this matter, the indigenous sources speak as if with one voice:

"The old ones used to say he was transformed to the dawn star; thus it is said that when Quetzalcoatl died this star appeared, and so he is named Tlahuizcalpanteuctli, "Lord of the Dawn House."61

Not unlike Nanahuatl, Quetzalcoatl was described as being horribly ugly in appearance, his face being distinguished by warts and other swellings. Indeed, the god was so intimately connected with skin diseases that he was deemed to be an advocate for human beings so afflicted:

"The annual ceremony to Ouetzalcoatl here is also described, which featured dancing by the merchants and lords and comic impersonations of deformed and diseased individuals and animals on a large platform in the patio of the temple. These had serious ritualistic overtones, for Quetzalcoatl was held to be 'abogado de las bubas y del mal de los ojos y del romadico y tosse.' During their mimic performances, the participants uttered pleas to this god for health, while sufferers from these afflictions came to his temple with prayers and offerings."62

As the buboes-laden god who became a "sun" and ushered forth a new age, Quetzalcoatl is evidently the same celestial figure as Nanahuatl.

At this point it will no doubt appear that we have wandered far afield from our original subject matter—namely, the Aztec cult of Xiuhtecuhtli. Yet Xiuhtecuhtli himself was

⁶¹ Quoted from the translation in *Ibid.*, p. 191.

⁶⁰ Quoted from the translation in M. Leon-Portilla & E. Shorris eds., *In the Language of* Kings: An Anthology of Mesoamerican Literature (New York, 2001), p. 58.

⁶² H. Nicholson, *Topiltzin Quetzalcoatl* (Boulder, 2001), p. 107.

expressly identified with the Morning Star in the *Dresden Codex*. The god's epithet "Prince of the Dawn" points in the same direction, recalling Quetzalcoatl's epithet *Tlahuizcalpanteuctli*, "Lord of the Dawn House."

There are additional reasons to suspect a fundamental affinity between Xiuhtecuhtli and the Morning Star. It will be remembered that the Aztec fire-god was conceptualized as dwelling within a turquoise enclosure, the latter explicitly identified with the cosmic hearth. Yet the turquoise enclosure in question, according to Sahagún, was the very place associated with the birth of the Nanahuatl. Witness the following account of the generation of the fifth sun:

"This is its [the sun's] story. It is said that when the god was made, when the god was formed, in the time of darkness, it is said, there was fasting for four days. It is said that the moon would be the sun...And it is said that when the moon would be the sun, it is said, a very great fire was laid in a place called the god's hearth, the turquoise enclosure...But he dared not do it [i.e., leap into the fire]; he feared the fire...But little Nanauatl had already dared; he thereupon leaped into the fire. Thus he became the sun "64"

Nanahuatl, not unlike Xiuhtecuhtli, was "born" from the turquoise hearth—hence the inherent connection between the drilled fire and the new-born "sun." And much as Xiuhtecuhtli was remembered as the archetypal sovereign, the *Leyenda* reports that, after suffering immolation on the hearth and transforming into a sun during a time of oppressive darkness, Nanahuatl became the ruler of the world (native sources describe him as being installed upon the celestial throne).⁶⁵

⁶³ See page 49 of the Codex as illustrated in C. & J. Villacorta, *The Dresden Codex* (Walnut Creek, 1930), p. 98. See also K. Taube, *op. cit.*, p. 49; S. Milbrath, "The Many Faces of Venus in Mesoamerica," in G. Villalobos & D. Barnhart eds., *Archaeoastronomy and the Maya* (Oxford, 2014), p. 126.

⁶⁴ B. Sahagún, *op. cit.*, p. 84.

⁶⁵ M. Graulich, "Aztec human sacrifice as expiation," *History of Religions* 39:4 (2000), pp. 356-357 writes: "In the *Leyenda*, when he reaches the sky, the supreme creators solemnly enthrone him."

Nanahuatl's post-mortem enthronement, moreover, mirrors the mythical biography of Quetzalcoatl who, according to the *Codex Chimalpopoca*, was first established on the throne *after* immolating himself on a great funeral pyre and becoming transformed into the Morning Star:

"The elders used to say that he was transformed into the star that comes out at dawn...They said that when he died, he did not appear for four days, because then he was dwelling amongst the dead (*Mictlan*); and that also by the fourth day he was provided with arrows; so that on the eighth day the great star appeared (Venus, the Morning Star), that they call Quetzalcoatl. And they added that it was then that he was enthroned as Lord."

As the legendary first ruler of Tula, Quetzalcoatl was regarded as the exemplary model for all future Mexican rulers. And much like Xiuhtecuhtli, Quetzalcoatl ruled from a turquoise house. Witness the following prayer addressing the Mexican god: "The turquoise house, the serpent house, you built them here in Tollan where you came to rule."

The Turquoise Enclosure

The sacred traditions of the Aztecs identify a turquoise enclosure as the dwelling-place of the archaic fire-god Xiuhtecuhtli—"the archetype of all rulers"—and describe it as a cosmic hearth or "circle of turquoise." A turquoise enclosure is also identified as the locus of sunrise—specifically, as the birthplace of Nanahuatl as the fifth sun. Such convergent traditions naturally beg the question: How are we to understand this turquoise structure from the perspective of ancient cosmological conceptions?

If the Aztec traditions reference a tangible celestial structure and encode actual historical events, as we believe to be the case, it stands to reason that other cultures around the

⁶⁶ Codex Chimalpopoca 11 as translated in E. Florescano, *The Myth of Quetzalcoatl* (Baltimore, 1999), p. 20.

⁶⁷ As translated in J. Bierhorst, *Four Masterworks of American Indian Literature* (Tucson, 1974), p. 65.

globe must have preserved analogous traditions with respect to a spectacular turquoise enclosure associated with the ancient sun.

Consider, for example, an image depicted on a Quapaw robe (Arkansas), circa 1740 (figure one). 68 In the image in question a green band encircles the sun.

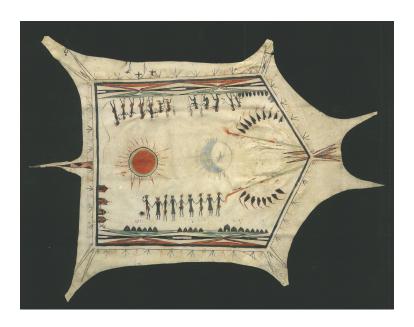


Figure one

Perhaps the most instructive parallel to Xiuhtecuhtli's turquoise enclosure is provided by the Egyptian *shen*-bond, commonly held to depict the sun set within a turquoise-colored band—this despite the fact that a turquoise-colored structure is nowhere to found in the immediate vicinity of the current solar orb (see figure two). Explicitly identified as a "circle in the sky," the so-called shen bond was a popular symbol of royalty otherwise known as the ring of sovereignty. ⁶⁹

⁶⁸ Adapted from Figure 12 in G. Torrence, *The Plains Indians: Artists of Earth and Sky* (Paris, 2015), p. 73.

⁶⁹ S. Quirke, *Ancient Egyptian Religion* (London, 1992), p. 62. See also A. Sugi, "The Iconographical Representation of the Sun God in New Kingdom Egypt," in Z. Hawass ed., *Egyptology at the Dawn of the Twenty-first Century, Vol. 2* (Cairo, 2003), p. 515.



Figure two

The turquoise colored shen-bond, in turn, shares a fundamental affinity with the crown of kingship associated with the Egyptian mother goddess Wadjet, the latter conceptualized as a uraeus-serpent incarnate in the royal crown. It was Wadjet—literally, "the green one"—who crowned the king in Egyptian coronation ritual, thereby marking him as universal sovereign: "By fixing the uraeus on the forehead of Ḥaremḥab, his right to be king is established."⁷⁰

As if to emphasize the inherent relationship between the encircling (*šnj*) uraeus-serpent and the *shen*-bond, Egyptian scribes occasionally wrote the word *šnw* with a determinative showing the outer band as a uraeus-serpent: ⁷¹ In perfect keeping with this archaic and multi-faceted symbolism, royal reliefs celebrating the Pharaoh's sovereignty depict the uraeus handing him the shen-bond. Sally Johnson emphasized this particular role of the uraeus-goddess:

"She presents to the king's cartouche and Horus name the w_3s , $\frac{1}{3}$, scepter and s_nw , Ω , the signs for 'dominion' and 'infinity of the circuit of the sun', 'enclosure' or cartouche', thereby legitimizing his crown and sovereignty."

Granted the possibility that the turquoise-colored shen-bond forms a structural parallel to the turquoise enclosure associated with the Aztec fire-god, how are we to understand this celestial "circle" from the vantage point of modern astronomy? In addition to identifying

⁷⁰ K. Bosse-Griffiths, "The Great Enchantress in the Little Golden Shrine of Tut'Ankhamun," in K. Bosse-Griffiths ed., *Amarna Studies and Other Selected Papers* (Fribourg, 2001), p. 118. See also the discussion in H. Frankfort, *Kingship and the Gods* (Chicago, 1948), p. 108.

W. Barta, "Zur Bedeutung des Stirnbands-Diadems," Göttinger Miszellen 72 (1984), p. 8.

⁷² S. Johnson, *The Cobra Goddess of Ancient Egypt* (London, 1990), p. 7.

the uraeus-goddess with the crown of kingship, the earliest Egyptian coronation rituals identify Wadjet with the Eye of Horus, a prominent symbol in ancient Egypt. 73 The Eye of Horus, in turn, is to be identified with the planet Venus as several Egyptologists have recognized.⁷⁴ Such converging and deeply intertwined traditions strongly suggest that the crown of kingship and shen-bond have something to do with the planet Venus.

Analogous ideas are evident in ancient Mesopotamia, where the planet Venus (as Inanna) was credited with investing the king with his extraterrestrial headband or crown. ⁷⁵ Thus an early hymn invokes the planet-goddess as follows:

"May the lord whom you have chosen in your heart, the king, your beloved husband, enjoy long days in your holy and sweet embrace! Give him a propitious and famous reign, give him a royal throne of kingship on its firm foundation, give him the scepter to guide the Land, and the staff and crook, and give him the righteous headdress and the crown which glorifies his head!"76

The Sumerian word translated here as "glorifies" is dalla, denoting a ring or crown. The same word also signifies "to appear" or "shine," and is commonly used to describe the rising of the sun or some other brilliant celestial body. The fundamental idea expressed in this passage is that it is the planet Venus itself which provides the king with his regal glory or "crown," thereby causing him to appear or "shine" as a "sun."

⁷³ See Utterance 220-222 in the Pyramid Texts.

⁷⁴ R. Krauss, "The Eye of Horus and the Planet Venus: Astronomical and Mythological References," in J. Steele & A. Imhausen eds., *Under One Sky* (Münster, 2002). See also R. Krauss, Astronomische Konzepte und Jenseitsvorstellungen in den Pyramidentexten (Wiesbaden, 1997), pp. 193-208. It will be noted that Talbott and I offered this identification well over a decade before Krauss.

⁷⁵ S. Beaulieu, Eve's Ritual: The Judahite Sacred Marriage Rite (Montreal, 2007), p. 42 notes that Inanna was associated with the "Nippur ritual of the king's crowning" already during the Early Dynastic II-III period (2500-2000 BCE."

⁷⁶ Lines 36-41 in "A song of Inana and Dumuzi (Dumuzid-Inana D1), ETCSL.

⁷⁷ Electronic Pennsylvania Sumerian Dictionary, at http://psd.museum.upenn.edu/epsd/ (hereafter ePSD). See also J. Halloran, Sumerian Lexicon (Los Angeles, 2006), p. 39.

The inherent connection between sovereignty and a headband is most explicit in early Sumerian texts surrounding the goddess Nintur, invoked as the "mother of the gods" and creator of kings.⁷⁸ A Temple Hymn describes the mother goddess's temple as follows:

"Mother Nintur, the lady of creation, performs her task within your dark place, binding the true *suh* crown on the new-born king, setting the crown on the new-born lord who is secure in her hand."⁷⁹

Evident here is the archaic conception that the mother goddess herself *creates* the king through her act of tying on the royal headband (suh), the latter of which is specifically described as greenish-blue in color.⁸⁰ The Sumerian pictograph transcribed as suh, moreover, is the very pictograph (MUŠ₃) employed to denote the planet Venus as Inanna in the earliest Sumerian texts, the clear implication being that the planet itself was conceptualized as a headband-like form at one point in its evolutionary history (see figure three).⁸¹



Figure three

It is significant to note, moreover, that Nintur's creation of the king is explicitly stated to have occurred in a "dark place"—ostensibly a reference to the innermost sanctum of the temple (literally the šag₄, or "heart," of the dark place, wherein ku₁₀-ku₁₀-ga qualifies ki,

⁸⁰ The royal headband is consistently described as za-gin (=lapis-lazuli), or greenish-blue in color. On the greenish color of lapis lazuli, see line 413 from *The Return of Lugalbanda*, as translated by H. Vanstiphout, *Epics of Sumerian Kings* (Leiden, 2003), p. 159.

⁷⁸ See Gudea A III 4-6 for Nintur's epithet "mother of the gods." See also the discussion in T. Jacobsen, "Notes on Nintur," *Or NS* 42 (1973), p. 278.

⁷⁹ Lines 500-503 from "The temple hymns," *ETCSL*.

⁸¹ P. Steinkeller, "Inanna's Archaic Symbol," in J. Braun et al eds., *Written on Clay and Stone* (Warsaw, 1998), p. 95: "It would seem, therefore, that the archaic symbol of Inanna depicts a scarf or head-band."

"place"). 82 Yet the very same word Kukku also serves as an archaic kenning for the Underworld, a clear indication that the innermost recess of the temple was intended to symbolize the "dark earth" or Underworld. 83

It will be remembered here that Xiuhtecuhtli, the archetypal king, was commonly believed to reside at the center of the earth enshrouded in darkness, where he was ensconced in a turquoise enclosure (*xiuhtetzaqualco*). According to Sahagún and his Aztec informants, the cosmic site in question was conceptualized as the Underworld. Recall again the passage quoted earlier:

"The old god spread out on the navel of the earth, within the circle of turquoise...The old god, he who inhabits the shadows of the land of the dead, the Lord of fire and of time." 84

Such archaic conceptions evidently inform the illustration from the *Codex Borbonicus* (Folio 34) depicting the New Fire ceremony (see figure four), wherein the ritual structure presiding over the drilling of fire is specifically labeled Tlillan, literally the "place or house of darkness." In short, it would appear certain that the New Fire, like Nintur's "king," was created in a place of darkness—i.e., the Underworld.

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⁸⁴ The Florentine Codex Chapter VI: 71v as translated in Miguel León-Portilla, Aztec Thought and Culture (Norman, 1963), p. 32.

⁸² T. Jacobsen, *op. cit.*, p. 107 translated the clause in question as follows: "working in a dark place, the womb (lit. 'heart')."

⁸³ On the kenning describing the underworld as the "dark place," see C. Woods, "Sons of the Sun," *Journal of Ancient Near Eastern Religions* 12 (2012), p. 88. On the symbolism in question, see W. Horowitz, *op. cit.*, p. 269.

⁸⁵ D. Durán, *The History of the Indies of New Spain* (Norman, 1994), p. 592. See also D. Carrasco, *City of Sacrifice: The Aztec Empire and the Role of Violence in Civilization* (Boston, 1999), p. 100.

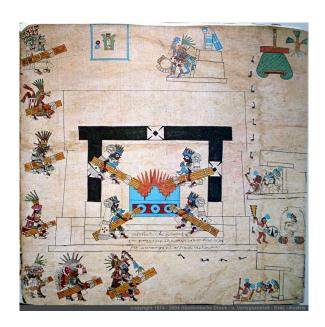


Figure four

Equally suggestive is the fact that Xiuhtecuhtli was also renowned for his turquoise headband—the *xiuhuitzolli*—the supreme symbol of kingship and sovereignty that ultimately came to serve as the Aztec ideogram for *tecuhtli*, "Lord or ruler." Johannes Neuroth, in his comprehensive study of the *xiuhuitzolli*, observed: "It was a widespread emblem of royal power in Post-classic Central Mexico." At the same time, however, he expressed puzzlement as to why the turquoise-colored headband was so intimately associated with the Aztec fire god: "To begin with, the symbolic significance of *xiuhuitzolli* seems to be founded on its association with the Aztec cult of fire."

From our vantage point there is no great mystery surrounding Xiuhtecuhtli's intimate connection with the royal headband (*xiuhuitzolli*). Taking our cue from the archaic Mesopotamian traditions attached to Nintur, we would suggest that the Aztec god's *xiuhuitzolli* is functionally analogous to the Sumerian king's turquoise-colored MUŠ₃-headband. The turquoise headband represents the "crown of kingship" and, as such, marks its wearer as the universal sovereign (*teuctli*). Compelling support for this

⁸⁶ On the crown as the ideogram for *tecuhtli*, see H. Nicholson, "A Royal Headband of the Tlaxcatleca," *Revista mexicana de estudios antropológicos* 21 (1964), p. 82.

⁸⁷ J. Neuroth, "Xiuhuitzolli—Motecuhzoma's Diadem of Turquoise, Fire, and Time," Archiv für völkerkunde 46 (1982), p. 123.

⁸⁸ *Ibid.*, p. 123.

hypothesis is offered by the circumstance that Aztec images of Xiuhtecuhtli show a muslike image attached to his headdress.⁸⁹

The Turquoise Dragon

A number of indigenous sources report that the Aztec fire-god was intimately associated with a turquoise-colored serpent known as Xiuhcoatl. Alternately described as a cometlike celestial body⁹⁰ or as a "Fire Serpent" weaponized in the service of Xiuhtecuhtli or Huitzilopochtli, the Xiuhcoatl is commonly depicted as a sort of head-ornament or backdevice adorning the Aztec fire-god (see figure five).⁹¹ Yet as Justyna Olko has documented, there is much reason to believe that the Xiuhcoatl-serpent is to be identified as the celestial prototype for the turquoise headband (*xiuhhuitzolli*):

"Of particular importance is the link between Xiuhtecuhtli and the fire serpent Xiuhcoatl, for this creature appears to have been the most probable prototype of the *xiuhhuitzolli*. It was Beyer who first suggested that the *xiuhhuitzolli* was a schematic form of the head and tail of Xiuhcoatl...Although the idea linking the shape of the *xiuhhuitzolli* to the fireserpent has not been developed or even accepted in any subsequent studies, there are good reasons to believe that it is valid." ⁹²

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⁸⁹ See figure 191 in Aztecs (London, 2002), p. 447. There Felipe Solis Olguin notes: "The deity is wearing his characteristic diadem..."

⁹⁰ M. Izeki, *Conceptions of 'Xihuitl': History, Environment and Cultural Dynamics in Postclassic Mexica Cognition* (Oxford, 2008), p. 41 notes that "the depiction of Xiuhcoatl in the history sections of the codices are limited to scenes recording the observations of comets."

⁹¹ J. Olko, *Insignia of Rank in the Nahua World* (Boulder, 2014), p. 54: "Xiuhtecuhtli and his fire-serpent manifestation [Xiuhcoatl] were believed to embody the celestial fire, also conceived as a dangerous weapon that could take the material form of turquoise." ⁹² *Ibid.*, p. 128.



Figure five

If the analyses of Olko and Beyer are well founded, it is patently obvious that the Xiuhcoatl's function as the serpentine-crown of Aztec kings (*xiuhhuitzolli*) offers a striking parallel to the fiery uraeus-serpent as the Egyptian Pharaoh's crown of sovereignty. At the same time, however, it is possible to recognize a certain affinity between the Xiuhcoatl's spiraling form as depicted in figure five and that displayed by the MUŠ₃-sign in the earliest Sumerian script (see figure three above). Equally significant is the fact that the MUŠ₃-sign denoting Inanna/Venus closely resembles a comet-like form, not unlike the Xiuhcoatl, which was expressly identified as a comet-like celestial body in Mesoamerican texts. How interesting, then, to find that the Sumerian word muš also denotes "serpent-dragon." Indeed, in early Sumerian temple hymns the MUŠ₃-headband is specifically likened to a giant muš-serpent, thereby confirming the former's serpentine nature.

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⁹³ Peter Huber, a noted authority on Mesopotamian astronomical traditions, observed that "The Inanna symbol sometimes looks like a comet." Quoted in L. Rose, "A Critique of Peter Huber," in L. Greenberg & W. Sizemore eds., *Velikovsky and Establishment Science* (Glassboro, 1977), p. 108.

⁹⁴ J. Halloran, Sumerian Lexicon (Los Angeles, 2006), p. 182.

⁹⁵ Line 112 as translated by Å. Sjöberg & E. Bergmann, *The Collection of the Sumerian Temple Hymns* (Locust Valley, 1969), p. 23.

Also relevant to the historical reconstruction offered here is the fact that the Sumerian fire-god Girra is described as residing within a MUŠ₃-band. A Sumerian temple hymn preserves this archaic idea:

"Your mùš (is) a mùš (lustrous as) lapis lazuli, spreading over Meslam, Your Prince Girra, the lord of Meslam. Huškia, the lord of Sunset, Nergal-Meslamtaea." ⁹⁶

The Sumerian fire-god is here described as residing within a turquoise-colored mùš (= $MU\check{S}_3$), the latter of which is intimately associated with the Underworld (Meslam), thereby paralleling Xiuhtecuhtli's dwelling within the turquoise enclosure which also doubled as the Underworld (Mictlan). And much as we would expect, Girra is specifically identified with the planet Mars (Nergal) as the "red/angry one" (huš) of the Underworld (ki).

To bring the argument full circle: In light of the fact that the turquoise enclosure served as a hearth in which the New Fire was drilled, it is significant to find that Aztec codices depict fire being drilled on the Xiuhcoatl serpent (see figure six). Karl Taube called attention to this peculiar motif: In many Late Postclassic Central Mexican representations of fire making, fire is drilled on the segmented, larval body of the Xiuhcoatl meteor serpent. Although such imagery is wildly incongruous as a realistic depiction of fire's generation in the natural world, it makes perfect sense given the historical reconstruction offered here, which recognizes a fundamental structural affinity between the turquoise-colored hearth and the turquoise-colored Xiuhcoatl serpent.

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⁹⁹ *Ibid.*, p. 294.

⁹⁶ Lines 462-465 as translated by Å. Sjöberg & E. Bergmann, *The Collection of the Sumerian Temple Hymns* (Locust Valley, 1969), p. 44.

⁹⁷ The Sumerian word huš denotes "fiery red, angry, fierce." The word ki, "earth," also signifies the Underworld. On Huškia as a name for Nergal/Mars, see A. George, A House Most High (Winona Lake, 1993), pp. 102, 492.

⁹⁸ Adapted from K. Taube, "The Turquoise Hearth," in D. Carrasco ed., *Mesoamerica's Classic Heritage* (Boulder, 2000), figure 10:15:c.

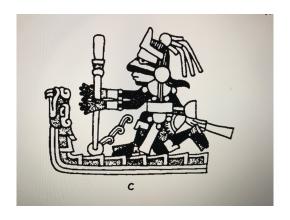


Figure six

To summarize the argument to this point: The key to understanding the Aztec traditions referencing a turquoise enclosure encircling the prototypical fire-god and serving as the god's hearth is a very real celestial structure that formerly spanned the heavens, the latter conceptualized as the crown of kingship *and* the house (temple) of the gods. 100 According to the historical reconstruction offered here, such mythological traditions encode astronomical events—specifically an extraordinary conjunction of planets in which the red planet Mars (Xiuhtecuhtli) was positioned in front of the much larger Venus (see figure seven). The image presented by this spectacular conjunction of planets was closely modeled by the Egyptian shen-bond, in which a green band appeared to surround a reddish orb. It is in this perfectly concrete sense, then, that we would understand the Skidi Pawnee report that a cosmic hearth associated with the planet Venus was the site of the prototypical drilling of fire by Mars.



 $^{^{100}}$ See the ground-breaking analysis in D. Talbott, *The Saturn Myth* (New York, 1980), pp. 145-171.

Figure seven

Occam's razor suggests that the turquoise-colored headband associated with the Aztec fire-god Xiuhtecuhtli (*xiuhhuitzolli*) is indeed identical in origin with the turquoise-colored enclosure (*xiuhtetzaqualco*) associated with the drilling of the New Fire. If the former object represented the royal crown marking Xiuhtecuhtli as the archetypal sovereign, the latter structure represented the cosmic hearth associated with the post-mortem transfiguration of Nanahuatl, the prototypical "sun" and "king" in Aztec cosmogony.

Lord of the Four Corners

Central to the Aztec traditions identifying the navel as the center of the world is that it was the source of all life, energy, and fire. Such conceptions feature prominently in the cult associated with Xiuhtecuhtli. Consider the cosmogram depicted in *Codex Fejervary-Mayer*, wherein Xiuhtecuhtli is pictured at the center of the cosmos (see figure eight). With regards to the symbolism depicted in this cosmogram, David Carrasco offered the following observation:

"At the heart of the universe stands the body of Xiuhtecuhtli, the Fire God. From his body flow four streams of blood into the four quarters of the universe, giving them energy and life." ¹⁰¹

¹⁰¹ D. Carrasco & S. Sessions, *Daily Life of the Aztecs* (London, 1998), p. 53.

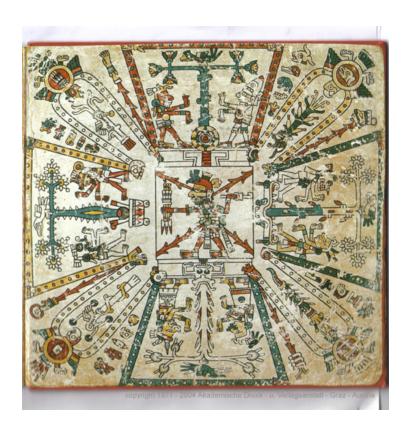


Figure eight

The epithet *Nauhyotecuhtli*, "Lord of the Four," evidently references Xiuhtecuhtli's explicit relation with the four corners. Alfonso Caso doubtless had it correct when he identified Xiuhtecuhtli as "the god of fire in relation to the cardinal directions." ¹⁰³

Xiuhtecuhtli's inherent connection with the four directions is also attested by his association with the so-called quincross, one of the most common symbols in Mesoamerican culture (see figure nine, wherein the god's headgear displays a number of quincrosses). Typically painted a luminous turquoise color, the cross in question is widely believed to symbolize or represent the Morning Star. 105

¹⁰² L. Lujan, *The Offerings of the Templo Mayor of Tenochtitlan* (Albuquerque, 2005), p. 147: "The Nahua invoked Xiuhtecuhtli by saying, '*Tlalxitenticae*, *Nauhiotecatlé*,' that is, 'he who fills the navel of the earth, he of the group of four'." See also B. Brundage, *op. cit.*, p. 226.

¹⁰³ As quoted in K. Bassie-Sweet, *Maya Sacred Geography and the Creator Deities* (Norman, 2008), p. 146.

Adapted from K. Taube, *The Major Gods of Ancient Yucatan* (Washington D.C., 1992), p. 125. D. Carrasco, *City of Sacrifice* (Boston, 1999), p. 103, similarly, noted that

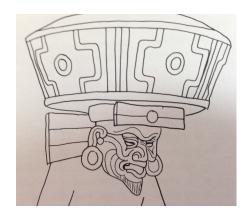


Figure nine

A closely related symbol is the quincunx (see figure ten). According to Karl Taube, the quincunx was a symbol of fire and signified the center of the world. Yet the center of the world is precisely the locus traditionally associated with Aztec fire-god, as documented by Sahagún and other early chroniclers. Pointing to Sahagún's statement that Xiuhtecuhtli resided at the center of the earth, Miguel Leon-Portilla observed: "From his position on the navel of the earth, the text implies, [Xiuhtecuhtli] sustains the world from its very center, at the mid-point of the four cardinal directions." 107

Much like the quincross, the quincunx was closely related to the color turquoise: "For the Aztecs, the quincunx represented turquoise, *xiuitl*, an important morpheme in the name Xiuhtecuhtli." At the same time the symbol is also thought to represent an Olmec symbol of the Morning Star. ¹⁰⁹

[&]quot;we can see this god as lord or center of the sacred number (groups) four (the cosmic directions)."

¹⁰⁵ J. Langley, "Teotihuacan Notation in a Mesoamerican Context," in M. Gallut ed., *Ideología y política a través de materiales, imágenes y símbolos* (Cordoba, 2002), p. 286: "These suggest that both the Quincross and its five circlet counterpart, the Quincunx, may on some occasions signify the planet Venus."

¹⁰⁶ K. Taube, "The Turquoise Hearth," in D. Carrasco ed., *Mesoamerica's Classic Heritage* (Boulder, 2000), pp. 312-316.

¹⁰⁷ M. León-Portilla, op. cit., p. 32.

¹⁰⁸ K. Taube, *The Major Gods of Ancient Yucatan* (Washington D.C., 1992), p. 125. See also P. Hajovsky, *On the Lips of Others: Moteuczoma's Fame in Aztec Monuments and Rituals* (Austin, 2015), p. 94.

¹⁰⁹ S. Milbrath, Star Gods of the Maya (Austin, 1999), p. 211.

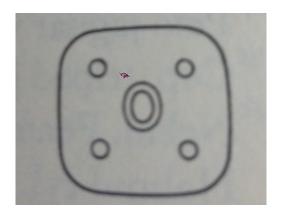


Figure ten

A quincunx-like image is intimately connected with the "Morning Star" in various Maya codices—the so-called Lamat Sign, or T-510 (see figure eleven). 110 When coupled together with the T-109 prefix chac, the phrase in question is known to denote "Great or Red" Star—i.e., the Morning Star. 111

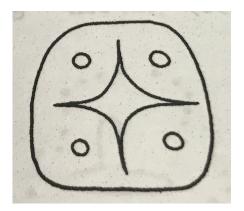


Figure eleven

This image, in turn, bears a close resemblance to the image depicted in figure twelve, believed to represent the "Morning Star" as the "Great Star" in the American

¹¹⁰ Adapted from M. Macri & M. Looper, *The New Catalog of Maya Hieroglyphs*

⁽Norman, 2003), p. 229.

111 B. Stross, "Venus and Sirius: Some Unexpected Similarities," *Kronos* XII:1 (1987), pp. 26-27.

Southwest. ¹¹² In addition to presenting a cross-like form, the "Great Star" image features a dark "sun" at the center of a four-fold star whose "rays" radiate outwards. ¹¹³



Figure twelve

With regards to the cruciform appearance of the "Great Star," quincross, and Lamat sign, it is significant to note that Amerindian tribes across the North American continent represented the Morning Star as a cruciform object. Such was the case amongst the Blackfoot¹¹⁴, Arapaho¹¹⁵, and Kiowa¹¹⁶, among others.¹¹⁷ Of the images in question, Alice Kehoe reports that the Maltese cross representing the Morning Star was typically

¹¹² J. Carlson, "Transformations of the Mesoamerican Venus Turtle Carapace War Shield," in V. del Chamberlain, J. Carlson, & M. Young eds., *Songs From the Sky* (Washington, D.C., 2005), p. 115. See also E. Cochrane, *On Fossil Gods and Forgotten Worlds* (Ames, 2010), pp. 124-138.

¹¹³ For an early example of the star in question see the La Venta colossal head 1 dating to the Olmec period. See figure 4.12 in F. Reilly, "The Landscape of Creation," in A. Stone ed., *Heart of Creation* (Tuscaloosa, 2002), p. 58. For a close parallel from the ancient Near East, see plate 3 in Grace White, "The Religious Iconography of Cappadocian Glyptic in the Assyrian Colony Period..." Dissertation for the University of Chicago (1993), p. 432.

North American Indians: Plains (Washington, 2001), p. 985. See also C. Wissler & D. Duvall, Mythology of the Blackfoot Indians (Lincoln, 1995), p. 42.

¹¹⁵ J. Anderson, *Arapaho Women's Quillwork* (Norman, 2013), p. 80.

¹¹⁶ See figure five in J. Levy, "Kiowa," in R. DeMallie ed., *Handbook of North American Indians: Plains* (Washington, 2001), p. 914.

¹¹⁷ R. Dangel, "Tirawa, der höchste Gott der Pawnee," *Archiv für Religionswissenschaft* 27 (1929), pp. 113-114, 140. Note: I am indebted to Rens van der Sluijs for this reference.

painted green in color. 118 Similar conceptions are evident in Mesoamerica, where Quetzalcoatl was represented bearing a shield with a Maltese cross. 119 According to Kehoe, the Maltese cross had reference to the four directions:

"Maltese crosses also occur prehistorically in Mesoamerica, where in the Valley of Mexico the basically similar four-petal flower design symbolized the universe (the four directions with the world in the center)."120

The Navaho, like the Aztecs, were keen observers of the sky and stellar imagery are conspicuous in their sacred iconography and artworks. ¹²¹ For the Navaho the stellar cross represented fire: "The cross also represents other things including fire and the four directions." 122 Now here is an idea not readily explained by the present sky: Why would fire, of all things, be compared to a cross or related to the four directions?¹²³

If Xiuhtecuhtli's association with the four quarters is to be traced to a specific naturalhistoric (i.e., astronomical) context, it stands to reason that analogous traditions should be associated with fire gods in other cultures far removed from Mesoamerica. Such is the case with regards to the Vedic Agni, who was expressly associated with the four quarters of the cosmos in the *Taittiriya Samhita*: "Seated on the back of the earth, Agni fills the air with his shine, props the sky with his light, upholding the quarters by his lustre (cf. Vaj.S. 17, 72)."

Analogous ideas are evinced in ancient Mesopotamia. There, in a hymn to the ancient sun-god Shamash, the fire-god Girra is explicitly linked to the four quarters: "Light of the

¹¹⁸ A. Kehoe, "Ethnoastronomy of the North American Plains," in V. del Chamberlain, J. Carlson & J. Young, Songs From the Sky (College Park, 2005), p. 135.

¹¹⁹ L. Séjourné, Burning Water (Berkeley, 1976), p. 137.

¹²⁰ A. Kehoe, *op. cit.*, p. 134.

¹²¹ See the frontispiece in B. Haile, *Starlore Among the Navaho* (Santa Fe, 1947).

¹²² V. del Chamberlain & P. Schaafsma, "Origin and Meaning of Navajo Star Ceilings," in V. del Chamberlain, J. Carlson, & J. Young eds., Songs From the Sky (Washington D.C., 1987), 91.

¹²³ Fire was represented as a cross in Old Europe as well. See V. Straizys & L. Klimka, "The Cosmology of the Balts," *Journal of the History of Astronomy* 22 (1997). p. 66.

great gods, light of the earth, illuminator of the four quarters...Your [rising] is blazing fire (literally: Girra)."¹²⁴

The Akkadian phrase translated as "four quarters" here is *kibrat erbetti*, the standard term for the four corners of heaven in Mesopotamian cosmic geography. Here it is significant to note that ancient terms for the "four quarters" also denote the "four winds." Knut Tallqvist underscored this curious element of ancient cosmology nearly a century ago:

"Sumerian *im*, Akkadian *šaru*, und Hebrew *ruah*, die alle eigentlich Wind aber auch Weltgegend bedeuten, nhd. *Windstrich*, Swedish *väderstreck*, Finnish *ilmansuunta* (eig. 'Luftrichtung'), English '*quarter of the wind* oder *the four winds*...und French *aire de vent* bezeugen endlich, dass Himmelsgegenden und Winde im Zusammenhang mit einander stehen." ¹²⁶

This widespread belief-system will not be easily explained by reference to the familiar natural world. In what sense is it possible to explain the fact that ancient skywatchers the world over would conceptualize an invisible force like the "wind" as a cruciform structure connected with the four world-directions?

Equally difficult to explain is the idea that the four winds emanated from the locus of the sunrise. This belief-system is attested in ancient Mesoamerica, as noted earlier:

¹²⁴ J. Polonsky, *The Rise of the Sun God and the Determination of Destiny in Ancient Mesopotamia, Vol. 2* (2002), p. 536. This is a PHD Dissertation for the University of Pennsylvania.

¹²⁵ A. Kehoe, "Ethnoastronomy of the North American Plains," in V. del Chamberlain, J. Carlson & J. Young, *Songs From the Sky* (College Park, 2005), p. 138 documents the same idea in the New World: "The world was divided into four quarters...and each quarter was likely to be personified as a Wind." See also T. Gamkrelidze & V. Ivanov, *Indo-European and the Indo-Europeans, Part 1* (Berlin, 1995), p. 585: "Certain Indo-European traditions, notably ancient Greek and Slavic, deified the winds from the four directions of the compass."

¹²⁶ K. Tallqvist, "Himmelsgegenden und Winde," *Studia Orientalia* 2 (1928), p. 106.

"That which was known as [the wind] was addressed as Quetzalcoatl. From four directions it came, from four directions it traveled. The first place whence it came was the place from which the sun arose, which they named Tlalocan." ¹²⁷

Although scholars have been hard-pressed to explain the origin of such widespread conceptions—one cannot see the four winds or world directions, after all—a perfectly logical solution was provided by David Talbott who, in *The Saturn Myth*, argued that the four winds/directions in question trace to the four streamers shown radiating outwards from the central "sun" in ancient Mesopotamian pictographs (see figure thirteen). A similar pictograph from Amerindian culture (Middle Mississippi Valley Group) is depicted in figure fourteen.

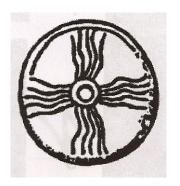


Figure thirteen

¹²⁷ B. Sahagún, *Florentine Codex: Book* 7 (Sante Fe, 1953), p. 14.

Adapted from figure 16 in A. Jeremias, "Schamasch," in W. Roscher ed., *Ausführliches Lexikon der griechischen und römischen Mythologie, Vol. 4* (Leipzig, 1965), col. 555. See also the discussion in W. Gaerte, "Kosmische Vorstellungen im Bilde prähistorischer Zeit: Erdberg, Himmelsberg, Erdnabel und Weltenströme," *Anthropos* 9 (1914), pp. 978-979.

¹²⁹ Adapted from M. Naylor ed., Authentic Indian Designs (New York, 1975), p. 14.



Figure fourteen

Given the fact that analogous images can be found around the globe, often in prehistoric (i.e., Neolithic) contexts, it is difficult to deny that they describe some empirically-based celestial reality, whether a temporary apparition or, more likely, a sustained stellar structure of some sort, such as a particularly spectacular nova or conjunction of planets. Granted this proposition, can it be doubted that if a prehistoric skywatcher were to behold such a celestial apparition he would conceptualize the four radiating streamers as four "streams" of "fire" or as four "winds" extending to the four corners of the universe? To merely pose this hypothetical question is to know the answer: The interpretation of the central orb's radiating streamers as four winds/fire would not only be a perfectly natural and rational idea, it would be predictable.

Conclusion

The foregoing analysis of Xiuhtecuhtli's cult has revealed that the Aztec fire-god was conceptualized as residing within a turquoise enclosure at the center of the earth, wherefrom he ruled over the four quarters of the universe. In addition to being the patron god of Aztec rulers and the archetypal king par excellence, Xiuhtecuhtli also presided over the New Fire rites believed to commemorate Creation and signal a new year.

As first documented here, the Aztec traditions attached to Xiuhtecuhtli find a remarkable parallel in ancient India, where the Vedic fire-god Agni was likewise conceptualized as residing in a hearth at the navel of the earth. Like Xiuhtecuhtli, Agni was regarded as the archetype of rulers and believed to reside at the central nexus of the four quarters of the

universe. The numerous correspondences between the disparate cults of Xiuhtecuhtli and Agni detailed here attest to the fundamental coherence of such archaic mythological structures.

It is our contention that the sacred traditions attached to Xiuhtecuhtli reflect archaic conceptions associated with the planet Mars (see next chapter). The fact that Xiuhtecuhtli is specifically identified with the Morning Star in the *Dresden Codex* is consistent with the Skidi identification of that star with the red planet. Yet it is the numerous parallels between Xiuhtecuhtli and Nanahuatl/Quetzacoatl that truly cements the case.

The peculiar and gruesome details of the Aztec New Fire ritual can only be fully understood by reference to the extraordinary recent history of Mars. The ritual called for the extinguishing of all fires precisely because Creation had occurred in the wake of an apocalyptic Darkness that had occluded a former "sun" (=Mars=Morning Star). The mass hysteria that greeted the extinction of fires associated with the New Fire ritual, in this sense, is functionally identical with the mass hysteria occasioned by solar eclipses since time immemorial. The absence of the perpetual fire, like the absence of the solar orb, portended a return to the apocalyptic Darkness and chaos that threatened to destroy the world in the fabled time of Beginning. The drilling of the New Fire—in reality, the generation of a new "sun"—served to dispel such fears while signaling a return to order and normalcy.

In Aztec tradition, as in cosmogonic myths the world over, Creation is accompanied by a greening of the cosmos and a sudden proliferation of fertility. The greening in question is inseparable from the towering cruciform structure that suddenly appeared with the "birth" of the Morning Star, whereupon four spectacular streamers of fiery material extended to the four corners of the universe. Although it is evident that the four streamers presented a plethora of different structural forms during the polar configuration's evolutionary history, the most spectacular phase—that associated with the very moment of Creation—found them assuming a brilliant turquoise color. Hence the turquoise color of the quincross associated with Xiuhtecuhtli. Make no mistake about it: The turquoise cross

radiating outwards from the Aztec fire-god constitutes a cosmogram encoding a historical reality—specifically, the prototypical appearance of the Morning Star/Sun.

To return to the cosmogonic myth that formed the cornerstone for this historical reconstruction: According to the Skidi Pawnee, Creation unfolded as the result of Morning Star (Mars) approaching and impregnating Evening Star (Venus)—a conjunction that is said to have occurred "in the center of the earth in darkness." The sexual union in question was believed to ensure a period of universal fertility and abundance. In Pawnee ritual, the marriage between Mars and Venus was purposefully reenacted with the drilling of fire, wherein the drilling stick was conceptualized as the Morning Star and the hearth as the planet Venus. It is our contention that the Aztec myth of the New Fire encodes the same extraordinary natural history, whereupon Xiuhtecuhtli (Mars) drilled fire within the turquoise-colored hearth (Venus), thereby sparking Creation and generating the birth of a new sun.

¹³⁰ R. Linton, "The Sacrifice to Morning Star by the Skidi Pawnee," *Leaflet Field Museum of Natural History* 6 (1923), p. 14.

¹³¹ *Ibid.*, p. 17.